



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,920	09/23/2004	Bae Yun-Ki	31758-207631	8301

26694 7590 11/22/2005

VENABLE LLP  
P.O. BOX 34385  
WASHINGTON, DC 20045-9998

EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT PAPER NUMBER

3618

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/508,920

Applicant(s)

YUN-KI, BAE

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/23/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

**Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

**Information Disclosure Statement**

2. The information disclosure statement filed September 23, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. For expedience of prosecution, the examiner has located copies of the JP documents, however the Korean documents were not available at the time of examination.

**Specification**

3. The disclosure is objected to because it is replete with minor grammatical informalities, such as: "the rotation of the permanent magnet generate..." (page 1, line 7); "a user plays skiing..." (page 1, line 15); "since a skin gear..." (page 1, line 15); "an accident may be increased..." (page 1, line 16); "ski which is implementing..." (page 2, line 1); "that a luminescent unit is blinked..." (page 2, lines 5-6). This is an exemplary listing only, the entire specification should be carefully reviewed and revised for grammatical informalities.

Appropriate correction is required.

**Claim Objections**

4. Claim 1 is objected to because of the following informalities: Claim 1 includes a number of instances of informal grammar, such as: "a ski formed of a plate..." (line 1); "a rotation wing having the same rotary shaft" (line 3). The claim should be revised for grammatical informalities. Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

5. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

Art Unit: 3618

regards as the invention. In claim 2, line 2, "the luminescent diode" lacks a clear antecedent basis (compare to line 6 of claim 1).

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manseth (US 4,864,860). Manseth teaches a ski (1) including a binding (2) and a luminescent portion including a plurality of light emitting diodes (30), wherein the mechanism is powered by a generator having a rearwardly positioned rotation wing element (15) mounted to the top of the ski (e.g., at 6), understood to be characterized as a wing in that it is mounted to be positioned off the main body of the ski, to the breadth claimed, an extension of which (34, 35) is used to power the lights. The reference to Manseth fails to specifically teach that the generator includes a permanent magnet which rotates with the rotation wing and a coil in which a current is induced. The construction of an electrical generator including a rotatable permanent magnet and fixed induction coil is very old and very well known in the electrical arts, and it would have been obvious to one of ordinary skill in the art at the time of the invention to construct the generator in a commonly known configuration so as to provide a working power source. As regards claim 2, the reference to Manseth fails to explicitly teach plural transmission windows for the LEDs, however it is well known to provide a viewing window for a light emitting element so as to protect it from the elements, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the LEDs taught by Manseth with protective viewing windows so as to prevent damage to the LEDs during the use of the ski.

Art Unit: 3618

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (JP 05-177027, cited by applicant) in view of Kutter (US 5,455,485). Takahashi teaches a ski having a translucent body (2) including a plurality of LEDs (6), for illuminating the ski, connected to a power source (4). The reference to Takahashi fails to explicitly teach a conductor for connecting the power source to the LEDs, however the provision of a conductor would be deemed inherent for operation of the illumination system. The reference to Takahashi fails to teach the provision of a generator powered from a rotation wing. Kutter teaches that it is old and well known to provide electrical power to a lighting circuit (51, 52) with a generator (2) which is driven from a "rotation wing" (31) mounted on a shaft (at 33) connected to the generator (2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the power generation device and rotary 'wing' taught by Kutter, mounted in place of the power source of the ski taught by Takahashi, for the purpose of allowing the motion of the ski to provide power, thus reducing the reliance on battery-only power. The reference to Kutter fails to specifically teach that the generator includes a permanent magnet which rotates with the rotation wing and a coil in which a current is induced. The construction of an electrical generator including a rotatable permanent magnet and fixed induction coil is very old and very well known in the electrical arts, and it would have been obvious to one of ordinary skill in the art at the time of the invention to construct the generator in a commonly known configuration so as to provide a working power source. As regards claim 2, the reference to Takahashi as modified by Kutter fails to explicitly teach plural transmission windows for the LEDs, however it is well known to provide a viewing window for a light emitting element so as to protect it from the elements, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the LEDs taught by Takahashi as modified by Kutter with protective viewing windows so as to prevent damage to the LEDs during the use of the ski.

### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cameron (US 4,546,650), Maier (US 4,837,494), Romuno (US

Art Unit: 3618

5,039,128), Ridge (US 6,086,2114), Seifert et al. (US 6,431,733) and Huang (US 6,588,913) teach ski and power generation systems of pertinence.

10. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

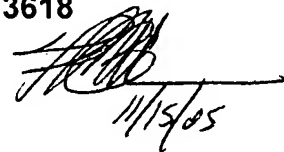
A response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**



11/15/05